9800169

THER UNITHED STATES; ORAMIERAGA

AXII Technology Holding Corp.

ILCCONS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN ODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY TECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'DP 7375 RR'

In Testimonn Therest, I have hereunto set my hand and caused the seal of the Hant Pariety Arctection Office to be affixed at the City of Washington, D.C. this tenth day of April, in the year two thousand three.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT V (Instructions and information	ARIETY PROTECTION (collection burden statement	CERTIFICA [*] on reverse)		quired in order to determine if a pi . Information is held confidential u	ant vanety pr Intil certificate	olection certificate is to be issued of is issued (7 U.S.C. 2426).	
1. NAME OF OWNER				2. TEMPORARY DESIGNATI EXPERIMENTAL NAME	ION OR	3. VARIETY NAME	
D&PL Technology Holding Corp.				DPX 9771 95-04386		DP 7375 RR	
4. ADDRESS (Street and No., or R.F.D. No.,	City, State, and ZIP Code, and Coun	try)		5. TELEPHONE (include area	a code)	FOR OFFICIAL USE ONLY	
100 N. Main Street Scott, Mississippi 38772				662.742.4141 6. FAX (include area code)		98 00169	
				662.742.31	.82 -	FILING DATE	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) 8. IF INCORPORATED, GIVE STATE OF INCORPORATION Corporation Delaware				9. DATE OF INCORPORATION February 29,	1	23 March, 1998	
10. NAME AND ADDRESS OF OWNER REP	RESENTATIVE(S) TO SERVE IN TH	IS APPLICATION	, (First person listed will i	receive all papers)		FILING AND EXAMINATION FEES:	
Kelly H. Casavec Research Coordin Delta and Pine L RcOwsBoMS157877 Scott, Mississip	ator and Company	1			FEC	DATE 23 March, 199	
11. TELEPHONE (Include area code) 662/742.4141	· · · · · · · · · · · · · · · · · · ·			MAIL = kelly.h.casavechia@ 14. CROP KIND (Common Name) deltaandpine.com SOYBEAN			
15. GENUS AND SPECIES NAME OF CROP		16.		AMILY NAME (Bolanical) 17. IS THE VARIETY A FIRST GENERATION			
GLYCINE MAX		İ	LEGUMINO	LEGUMINOSAE HYBRID?			
18. CHECK APPROPRIATE BOX FOR EACH reverse) a. X Exhibit A. Origin and Breeding b. X Exhibit B. Statement of Distinct	History of the Variety	v instructions on	19. DOES THE CERTIFIED	OWNER SPECIFY THAT SEED () SEED? See Section 83(a) of YES (If "yes", answer items 20 and 21 below)	tne Plant vai	RIETY BE SOLD AS A CLASS OF riety Protection Act) NO (If "no", go to item 22)	
c. XX Exhibit C. Objective Description d. XX Exhibit D. Additional Description e. XX Exhibit E. Statement of the Bas f. XX Voucher Sample (2,500 viable of verification that tissue culture were pository)	n of the Variety (Optional) sis of the Owner's Ownership untreated seeds or, for tuber propagal ill be deposited and maintained in an		IF YES, WH	20. DOES THE OWNER SPECIFY THAT SEED OF THIS YES NO VARIETY BE LIMITED AS TO NUMBER OF CLASSES? IF YES, WHICH CLASSES? FOUNDATION REGISTERED CERTIFIED 21. DOES THE OWNER SPECIFY THAT SEED OF THIS YES NO VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?			
9. X Filing and Examination Fee (\$2 States' (Mail to the Plant Variet)	,705), made payable to "Treasurer of y Protection Office)	the United	NUMBER 1,	IF YES, SPECIFY THE FOUNDATION REGISTERED CERTIFIED NUMBER 1,2,3, etc. (If additional explanation is necessary, please use the space indicated on the reverse.)			
22. HAS THE VARIETY (INCLUDING ANY HAFROM THIS VARIETY BEEN SOLD, DISPOTHER COUNTRIES?	ARVESTED MATERIAL) OR A HYBRI POSED OF, TRANSFERRED, OR US	D PRODUCED ED IN THE U.S. (23. IS THE VAR PROPERTY	23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?			
☐ YES ☑ NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)							
24. The owners declare that a viable sample of for a tuber propagated variety a tissue cult. The undersigned owner(s) is(are) the owner and is entitled to protection under the provious control of	er of this sexually reproduced or tuber isions of Section 42 of the Plant Varie	propagated plant ty Protection Act.	variety, and believe(s) the				
SIGNATURE OF OWNER	11222 C		SIGNATURE OF	OWNER		A	
NAME (Please print or type)	<u></u>		NAME (Please p	vint or type)	,		
William V. Hugie							
CAPACITY OR TITLE Vice President Of Research		29/02	CAPACITY OR 1	TITLE		DATE	
S&T-470 (07-01) designed by the Plant Variety Pr		Replaces STD-4	70 (04-01) which is obso	lete. (See reverse for instr	uctions and ir	nformation collection burden statement)	

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

- 18a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances; if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

case apRoundup.Ready seeds are covered under U.S. Patents: 5,633,435; 5,352,605;

5,530,196; 5,188,642; 4,940,835; 5,717,084; 5,728,925; and 5,804,425.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/isg/seed.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T-470 (07-01) designed by the Plant Variety Protection Office with WordPerfect 9.0. Replaces STD-470 (04-01) which is obsolete.

EXHIBIT A

DELTAPINE SEED'S APPLICATION FOR DP 7375 RR D&PL Technology Holding comporation (67: 8128/2002)

ORIGIN AND BREEDING HISTORY

Summer	· -	
Winter	1992	Original cross and first backcross made between DPX 2384, an
		experimental breeding line and Roundup Resistant experimental line 40-3-2
Fall	1992	DP 415 crossed with Roundup resistant F ₁ plants from 2384 BC ₁ F ₁
Winter	1993	Hutcheson crossed to Roundup resistant F_1 plants from DP 415 x 2384 BC_1F_1
Summer	1993	Cross 93-401 made - DP 3682 crossed to Roundup resistant F_1 plants from Hutcheson x (DP 415 x 2384 BC ₁ F_1)
Winter	1993-94	Roundup tolerant F ₁ plants advanced to F ₂ under lights from cross 93-401 in Costa Rica and F ₂ seed was bulked
Summer	-	-
Fall	1994	Roundup resistant F ₂ advanced to F ₄ by modified single seed descent in Costa Rica
Winter	1994_95	Roundup resistant F ₄ plants space planted. Individual plant selections
Willier	1777-73	harvested and threshed separately
Summer	1995	F ₅ Roundup resistant plant rows from cross 93-401 were grown at Scott, MS. Row 95-04386 was selected, composited and determined to be stable and breeding true for characteristics described in "Exhibit C" of this application. No variants were known or observed at that time and hence to the present.
Summer	1996	Yield tested at two locations in South Carolina.
Fall	1996-	Border rows harvested and sent to Costa Rica for a double increase in
Spring	1997	fall of 1996 and winter of 1997. About 200 units of breeder seed were produced.
Summer	1997	95-04386 yield tested in 5 Deltapine Seed test as DPX 9771 RR and
		increased to 4000 bushels of foundation seed.
	1998	DPX 9771 RR designated and released as DP 7375 RR.

EXHIBIT B

-DELTAPINE SEED'S APPLICATION FOR DP 7375 RR DEPL Technology Holding Corporation (BT: 8/28/2002)

NOVELTY STATEMENT

To our knowledge, DP 7375 RR most resembles HASKELL. Differences include but, are not restricted to the following:

- 1) DP 7375 RR has grey pubescence whereas Haskell has tawny pubescence.
- 2) DP 7375 RR is susceptible to root knot nematodes whereas Haskell is resistant.
- 3) DP 7375 RR carries the Roundup Ready™ trait whereas Haskell does not.

2

PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MARYLAND 2070S

7 () () () () () ()

OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max 1.1

				(01)	une max 🔾		
DAPI	Technologi	ttolding Corpor	alian	TEMPOR	ARY DESIGNATION	VARIETY NAME	
-De	el tapine	Seed Inter	(28/2062)	DPX 97	771 RR	DP 7375 RR	•
				05_0/3		1	4.1
ADDR	ESS (Street at	d No., or R.F.D. No	o., City, State, and Zip	Codel		FOR O	FFICIAL USE ONLY
10	00 Main S	treet, P.O.	Box 157			PVPO NUMBER	
	cott, MS				•		* * * * * * * * * * * * * * * * * * *
		337.7				ugn	0169
Chook	c the annual		ich characterizes the	1311		300	0.1.03
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	1 = Spherical	(L/W, L/T, and T/V	Viratios = < 1.2)	· · · · · · · · · · · · · · · · · · ·	l Essencial Classic de		
	3 = Elongate	(UT 1200 > 1.2:1	M- < 1.21	4.	Spherical Flattened (UW 04(6 > 1.2; {/ {	natio = < 1.2]
			•		Elongate Flattened (I	21 1200 2 175 1W	> 1.21
, SEED	COAT COLO	R: (Mature Seed)			 		
		•				1.	
1 1	1 - Yellow	2 = Green	3 = Brown	A = 014.	ن محد م		
			↓ CIOMI	4 - Black	, 5 = Other (S	pecify)	
SEED	COAT-HIST	R: (Mature Hand S	1.8.40		<u> </u>		
	JOHN LOGIE	are functions string 2	Hicked Seed)	•	•		
2	1 - 5 - 4 46					4	
	1 - Day (Coc	roy 79'; "Braxton"]	2 ~ Shiny ('Nel	bsoy': Gasoy 17	7		
			!				
SEED	SIZE: (Metun	Seedi			- • 	 	·
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3	Grams per 100	Land.					
لئا	County bet 100	secot.					
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HILUM	COLOR: (M	eture Seed)	····				
5	1 = Buff	2 = Yellow	3 = Brown	4 = Gray			
			5 0.011.1	4 - Gray	5 = Imperfect Black	6 = Btack	7 = Other (Specify
		 	<u> </u>				
COTYL	TEDON COFO	R: (Mature Seed)					
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1	I - Yellow	2 = Green					
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SEFO P	ROTEIN PC	OXIDASE ACTIVIT			· · · · · · · · · · · · · · · · · · ·		
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0 1	- Type A (SP	(3) -	2 * Type B (SP1 ^b)		-		
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TYPOC	OTYL COLOR	:			-		
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3 1	" Green only	("Evans"; 'Davis")	2 - Green wit	th bronze hand h	elow cotyledons (Woo	ه سدینی	*
3	~ Light Purple	below cotyledons (oworth": "Tracy"!	
4	- Dark Purple	extending to unifol	iate leaves ("Hodgson";	*Coker Hamoro	n 76641		
				~~~ci iterit(t)	200A I		
		<del></del>					
	T SHAPE:	·		- <u></u> -			

4 - Other (Specify)

11. LEAF		
2	1 - Small ('Amsoy 71'; 'A5312') 2 - Medium ('Corsoy 79'; 'Gasoy 17')	
كا	3 - Large ('Crawford'; 'Tracy')	e e e e e e e e e e e e e e e e e e e
12 LEAF	COLOR:	
[2]	1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton')	2.5
لــًا	3 - Dark Green ('Gnome'; 'Tracy')	12 C
II FLOW	ER COLOR:	
2	2 = Purple 3 = White with purple throat	er Sala Sec. 1
	and the second of the second o	<u> </u>
4. POD C	OLOR:	tyrat syrat
	1 = Tan 2 = Brown 3 = Black	
د د د		
PLAN	T PUBESCENCE COLOR:	
	1 = Gray 2 = Brown (Tawny)	
ı		
, PLAN	T TYPES:	
	1 = Stender ('Essex'; 'Arnsoy 71') 2 = Intermediate ('Amcor'; 'Braxton')	
3	3 - Bushy ('Gnome'; 'Govan')	
		- 1
, PLANT	THABIT:	+ 43 (1) + (1) + (1) + (1) + (1)
	1 = Determinate ('Gnome'; 'Braxton') . 2 = Semi-Determinate (Will')	
	3 = Indeterminate ("Nebsoy": "Improved Pelican")	
	•	
B. MATU	RITY GROUP:	
1 0	1-000 2-00 3-0 4-1 5-11 6-111 7-1V 8	- v
لـلــ	9 - VI 10 - VII 11 - VIII 12 - IX 13 - X	A
L DISEA	SE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)	
BACT	TERIAL DISEASES:	
2	Bacterial Pustule (Xanthomonas phaseoli var. sojensis)	er en
	The state of the s	
0	Bacterial Blight (Pseudomonas glycines) & De De	¥
	Wildlire (Pseudomonas təbəci)	
FUNGA	AL DISEASES: 03/4 - 1 1/2/2000	
0	Brown Spot (Septoria glycines)	
	Frogeye Leaf Spot (Cercospora sojina)	
	Race 1 0 Race 2 0 Race 3 0 Race 4 0 Race 5 1 Other (Special	wi.
	Race Un	
لما	Target Spot (Corynespora cassiicola)	
0	Downy Mildew (Peronospora trifoliorum var. manshurica)	
	Powdery Mildew (Microsphaera diffusa)	en e
$\equiv$	Brown Stem Rat (Cephalosporium gregatum)	
101	NOMES AND THE PROPERTY OF THE	*
لِيا	Brown State Cot (Schiller)	

21 GIVE DATA FOR KURMITTED AND SIMICAR STANDARD VAILIETY: Paled Computer Date

VARIETY	NO. OF	PLANT "	CM PLANT	LEAFLET SIZE		SEED CON	TENT	SEEO SIZE G/100	NO
depositional and the second se	MATURITY		HEIGHT	CM Midel .	CM Length	X Frotein	x oa	SEEOS	\$605/
? 7375 RR Submitted	144	1.4	71				. *		
1skell Name of Similar Variety	143	1.9	68			•			

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
- 2. Buttery, B.R. and R.I. Buzzell, 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
- 2: Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A2 in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
- 4. Payne, R.C. and L.F. Morrie. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

03:8V £2 MW FS.

NATE OF WAR

#### **EXHIBIT D**

# DELTAPINE SEED'S APPLICATION FOR DP 7375 RR DEPLY TECHNOLOGY Holding Corporation (BT: 8/28/2002)

#### **ADDITIONAL DESCRIPTION OF VARIETY**

DP 7375 RR is an  $F_4$  selection composited in the  $F_5$  from the cross DP 3682 X Hutcheson x (DPX 2384(2) x 40-3-2)]. It is of early Group VII maturity, on average, one day later than Haskell. It is being released because of its yield potential combined with the Roundup ReadyTM trait. DP 7375 RR has purple flowers, grey pubescence, and tan podwalls. The seeds average 3800 per pound and are shiny yellow with imperfect black hila. DP 7375 RR is susceptible to common and peanut root knot nematodes, frogeye leafspot, and stem canker. DP 7375 RR is moderately resistant to race 3 of soybean cyst nematode.

## PRODUCT SUMMARY SHEET

#### **KEY FEATURES**

Good yield potential

Good adaptability to both Midsouth and Southeast

Phenotype

Roundup ReadyTM

Moderately resistant to race 3 SCN

Very good standability and appearance

#### PRODUCT DESCRIPTION

Trait

	THEHOLYPE
Relative maturity	7.3
Roundup Ready™	Yes
STS®	No
Flower color	Purple
Pubescence color	Grey
Hilum color	imperfect black
Podwall color	Tan
Seed size	3800/lb
Seed protein	Untested
Seed oil	Untested
Peroxidase reaction	Positive
Seedcoat luster	Shiny
Hypocotyl color	Purple
Seed shape	Spherical flattened
Leaflet size	Medium
Leaflet color	Medium green
Canopy	Closed
Growth habit	Determinate
SCN race 3	Moderately resistant
SCN race 14	Segregating
Common root knot	Susceptible
Peanut root knot	Susceptible
Javanese root knot	Susceptible
Lance nematode	Untested
Frogeye leafspot	Susceptible
Sudden death	Untested
Stem canker	Susceptible
Phytophthora root rot	Untested
Red crown rot	Untested
Chloride tolerance	Untested
Recence's subjective	DATINGS

#### BREEDER'S SUBJECTIVE RATINGS

Excellent
Good
Good
Excellent
Excellent
Excellent

Poorly-drained soils Shatter resistance

Good Excellent

#### PRODUCT IDENTITY

Line selected by:

Dr. Grover Shannon

Suggested name:

DP 7375 RR

Former designation:

DPX 9771 RR, 95-04386 Pedigree: DP3682*[Hutcheson**(DPX2384(2)*40-3-2)]]

DPX2384 was selected from DPL415*DPL105

Areas of adaptation:

Midsouth and Southeast

Replace:

Complement:

DP3681, DP 3733

Main competition:

H6686 RR, H7550 RR

Most similar line:

H6686 RR

#### YIELD HISTORY

Outyielded H7550 RR by 0.3% in 3 Midsouth trials Outyielded H7550 RR by 7% in 2 Southeast trials Yield rank was 46/48 over 5 locations in 1997 Yield rank was 6/48 over 1 location in 1996

#### KNOWN WEAKNESSES

Susceptible to root knot nematodes Susceptible to frogeye leafspot Susceptible to stem canker

#### SEED STOCK STATUS

4000 units of Foundation seed are available.

# **DP 7375 RR**

#### PRODUCT PERFORMANCE

# Combined data, all locations:

	MAT	<u>HGT</u>	<u>LDG</u>	<u>GR</u>	
DPX 9775	-3	29.0	1.8	2.1	
P9831	-1	28.0	1.2	1.8	
COOK	Ö	32.0	1.8	2.1	
HASKELL	-2	27.0	1.9	2.5	
BENNING	-5	31.0	1.1	3.3	
DP 7375 RR	-1	28.0	1.4	2.4	
H7550 RR	-2	28.0	1.1	2.8	
Mean	53.0	31.0	1.6	2.3	
Locations	2	4	4	4	

# Midsouth data

# Midsouth, all locations

•	YIE	ELD	MAT	HGT	LDG	<u>GR</u>
	bu/ac	%BENNING				
DPX 9775	63.0	119	-3	21:0	1.3	1.5
HASKELL	61.7	116	-2	20.0	1.4	1.8
COOK	59.3	112	54.7	24.0	1.3	1.5
P9831	57.8	109	-1	20.0	1.0	1.3
BENNING	53.1	100	-5	30.0	1.0	2.4
DP 7375 RR	51.9	98	-1	20.0	1.0	1.7
H7550 RR	51.7	97	-2	20.0	1.0	2.1
Mean	57.8		53.0	23.0	1.2	1.7
Locations	3		2	3	3	3

#### Midsouth, by state:

	YIELD	<u>/</u>	LA	MS
	<u>bu/ac</u>	%BENNING	bu/a	ас
DPX 9775	63.0	119	63.0	63.0
HASKELL	61.7	116	58.7	63.2
COOK	59.3	112	61.7	58.2
P9831	57.8	109	54.3	59.5
BENNING	53.1	100	45.7	56.9
<u>DP 7375 RR</u>	51.9	98_	44.7	<u>55.5</u>
H7550 RR	51.7	97	50.0	52.5
Mean Locations	57.8 3		54.5 1	59.4 2

Data collected from Scott, MS (loam and clay); and Morganza, LA.

# **DP 7375 RR**

#### PRODUCT PERFORMANCE

#### Southeast data:

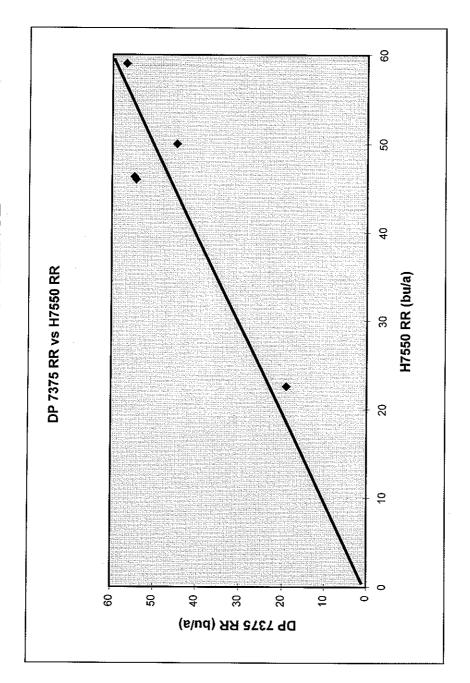
Southeast, all locations:

<u> </u>	•			
YIELD		HGT	LDG	<u>GR</u>
u/ac	%BENNING		······	
47.2	122	31.0	1.0	1.8
	115	39.0	2.0	2.0
42.3	109	35.0	2.0	2.0
38.8	100	33.0	1.0	2.3
38.3	99	30.0	1.3	3.0
37.0	95	35.0	1.3	2.5
34.6	89	36.0	1.0	3.0
11.0		37.0	1.7	2.6
2		1	1	1
	9u/ac 47.2 44.5 42.3 38.8 38.3 <b>37.0</b> 34.6	YIELD  9u/ac	YIELD         HGT           bu/ac         %BENNING           47.2         122         31.0           44.5         115         39.0           42.3         109         35.0           38.8         100         33.0           38.3         99         30.0           37.0         95         35.0           34.6         89         36.0           41.0         37.0	YIELD         HGT         LDG           9u/ac         %BENNING         1.0           47.2         122         31.0         1.0           44.5         115         39.0         2.0           42.3         109         35.0         2.0           38.8         100         33.0         1.0           38.3         99         30.0         1.3           37.0         95         35.0         1.3           34.6         89         36.0         1.0           41.0         37.0         1.7

# Southeast, by state:

The southeast data are from two locations in South Carolina: Hartsville and Summerton

# DP 7375 RR PRODUCT PERFORMANCE



This scattergram depicts the head-to-head performance of DP 7375 RR compared to H7550 RR. In five trials conducted in 1997, three in the Midsouth and two in the Southeast, DP 7375 RR outyielded H7550 RR two times.

# **DP 7375 RR**

#### **DISEASE REACTION DOCUMENTATION**

Soybean Cyst Nematode (Heterodera glycines)

Data from Dr. Lawrence Young, USDA, Jackson, Tennessee 1997

<u>Line</u>	Race 3 Score	Race 14 Score
DP 7375 RR	1.3	3.7*
HUTCHESON	4.9	4.7
CENTENNIAL	1.2	4.3
BEDFORD	1.0	1.6
HARTWIG	1.0	1.0

Scale: 1= 0 to 5 females/plant, 2= 6 to 10, 3= 11 to 20, 4 = 21-40, 5 = more than 40 females/plant

Root Knot Nematode (Meloidogyne incognita and M. arenaria)

Data from Dr. Robert Kinloch, Univ. of Florida, Jay, Florida 1997

<u>Line</u>	M.I. <u>Score</u>	<i>M.A.</i> Score	
DP 7375 RR	3.5	4.0	
DAVIS	3.0	4.5	
S65-50	1.0	3.0	

Scale: 1=no galling, 5=very severe galling

Stem Canker (Diaporthe phaseolorum (Cooke & Ellis) Sacc. f. sp. meridionalis (Morgan-Jones)

Data from Dr. Grover Shannon, Deltapine Seed, Scott, Mississippi 1997

<u>Line</u>	<u>Score</u>
DP 7375 RR	3.5
P9831	1.0
BENNING	1.0
HASKELL	1.0
H7550 RR	1.0

Scale: 1=no symptoms, 5=very severe symptoms

^{*} Single plant data suggest that DP 7375 RR is segregating for resistance to race 14

775M Combined analysis, all locations 1997

HGT II	OG GR
	.2 1.8
32.0 1	.8 2.1
27.0 1	.9 2.5
41.0 1	.1 3.3
28.0 1	4 2.4
28.0 1.	.1 2.8
31 0 1	.6 2.3
	32.0 1 27.0 1 41.0 1 28.0 1

## 775M Yield by location

NAME	MEAN	MSSL	MSSC	LAMO	SCHA	SCSU
P 9831	53.6	57.3	61.7	54.3	28.9	65.2
COOK	52.5	48.3	68.0	61.7	25.1	59.2
HASKELL	52.3	55.3	71.0	58.7	20.0	56.3
BENNING	47.4	52.0	61.7	45.7	25.0	52.3
DP 7375 RR	45.9	54.3	56.7	44.7	19.1	54.7
H7550RR	44.8	46.0	59.0	50.0	22.6	46.3
GRAND MEAN	51.1	55.5	63.3	54.5	23.4	58.3
CV		8.1	7.0	9.6	14.8	13.7
LSD _{0.05}		6.1	6.0	7.1	4.7	10.8

775M Yield as a percentage of COOK

NAME	MEAN	MSSL	MSSC	LAMO	SCHA	SCSU
P 9831	102	119	91	88	115	110
COOK	100	100	100	100	100	100
HASKELL	100	114	104	95	79	95
BENNING	90	108	91	74	100	88
DP 7375 RR	87	112	83	72	76	92
H7550RR	85	95	87	81	90	78

^{*}LAMO - Morganza, Louisiana *MSSC - Scott Clay, Mississippi *MSSL - Scott Loam, Mississippi

^{*}SCHA - Hartsville, South Carolina

^{*}SCSU - Summerton, South Carolina

REPRODUCE LOCALLY: Include form number and edition date on al	l racyculactoria	ORM APPROVED - ONB No. 0581-0058			
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE  EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).				
1. NAME OF APPLICANT(S)  D&PL Technology Holding Corp.  4. ADDRESS (Seed and Section 19)	2 TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER DPX 9771 95-04286 3 TELEPHONE MEANS PRES CORE	3 VARIETY NAME  DP: 7375 RR			
100 N. Main Street Scott, Mississippi 38772	662.742.4141 7. FVPO NUMBER	6. FAX (nector and control) 662.742.3182			
8. Does the applicant own all rights to the variety? Mark an "X" in the	e appropriate block. If no, please expl	ain X YES I			
9. is the applicant (individual or company) a U.S. National or a U.S.	based company? If no, give name of co	ountry X YES NO			
10. Is the applicant the original owner?   χ YES NO	If no, please answer <u>one</u> of the foll	owing:			
a. If the original rights to variety were owned by individual(s), is	(are) the original owner(s) a U.S. Nationa	al(s)?			
YES NO If no, give name of country					
b. If the original rights to variety were owned by a company(ies)	) is (are) the original owner(s) a LLS has	sed company?			
YES NO		oo oonpany.			
11. Additional explanation on ownership (If needed, use the reverse	for extra space):				
DP 7375 RR contains a proprietary gen licensed to D&PL, which encodes a pro glyphosate herbicide in soybean culti	tein which provides tole	nto Company and rance to			
PLEASE NOTE:					
Plant variety protection can only be afforded to the owners (not licens	sees) who meet the following criteria:				
If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals o	erson must be a U.S. national, national of f the U.S. for the same genus and specie	of a UPOV member country, or es.			
<ol><li>If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a genus and species.</li></ol>	yed the original breeder(s), the company country which affords similar protection t	must be U.S. based, owned by o nationals of the U.S. for the same			
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must m	eet one of the above criteria.			
The original breeder/owner may be the individual or company who di Act for definitions.	rected the final breeding. See Section 4	1(a)(2) of the Plant Variety Protection			
According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, control number. The valid OMB control number for this information collection is 0581-0055, response, including the time for reviewing the instructions, searching existing data sources,	The time required to complete this information collect	tion le actionated to aucoman C minutes nor			
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ST-470-E (04-99) (Destroy previous editions).

#### **EXHIBIT E**

# DELTAPINE SEED'S APPLICATION FOR DP 7375 RR

# STATEMENT OF APPLICANT'S OWNERSHIP

DP 7375 RR originated and was developed by Grover Shannon, Ph.D. and Chris Tinius, Ph.D., soybean breeders, Delta and Pine Land Company, dba Deltapine Seed. By agreement between employee and Delta and Pine Land Company, rights to any invention or discovery are assigned to the Company. No rights to any invention or discovery are retained by the employee.